MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN
JSC "KAZAKH-BRITISH TECHNICAL UNIVERSITY"

Approved by
Acting Rector of JSC "KBTU" Gabdullin M.T.
Minutes SC № 13 dated "30" 06 2021

Working Curriculum
Educational program «Mathematics and Computer Modelling» ISE
of the 2021-2022 Academic Year

Academic Degree: Bachelor in Information and Communication Technology
Study Duration: 4 years

Year of Study	Code	UoL Code	Discipline	Cycle	Total credits ECTS	Total credits KZ	Hour Breakdown	Prerequisites
1			**1 semester**					
	ISE1103	X	English Language 1	G	6	4	0/0/4	
	HUM 1101	X	Modern History of Kazakhstan	G	5	3	2/0/1	
	ISE1209	X	Principles of Microeconomics	C	5	3	2/0/1	
	ISE1211	X	Principles Statistics 1	C	5	3	2/0/1	
	ISE1213	X	Principles Calculus 1	C	5	3	2/0/1	
	PHE 101	X	Physical Education 1	G	4	2	2/0/1	
			Total		**30**	**18**		
2			**3 semester**					
	ISE1207	EC1002	Introduction to economics: Microeconomic Theory	C	5	3	2/0/1	
	ISE1217	ST104a	Statistics 1	C	5	3	2/0/1	
	ISE1219	MT1173	Algebra 1	C	5	3	2/0/1	
	ISE1215	MT1174	Calculus 1	C	5	3	2/0/1	
	LAN 1115 - LAN 1117 / LAN 1119	X	Kazakh/Russian language	G	5	3	2/0/1	
	HUM 1132	X	Social and Political Science Module (Sociology and Political Science)	G	3	2	2/0/0	
			Total		**28**	**17**		
3			**5 semester**					
	ISE1201	EC2066	Microeconomics 1	C	5	3	2/0/1	EC1002 / MT105a or MT1174
	ISE1202	EC2065	Macroeconomics 1	C	5	3	2/0/1	EC1002 / MT105a or MT1174
	ISE1221	EC2020	Elements of Econometrics 1	C	5	3	2/0/1	EC1002 / ST104a / MT105a or MT1174 or MT1186
	ISE1326	MT2175	Further Linear Algebra 1	S	3	2	1/0/1	MT1173
	ISE1328	MT2176	Further Calculus 1	S	3	2	1/0/1	MT1174
	HUM 1133	X	Social and Political Science Module (Psychology and Cultural Studies)	G	5	3	3/0/0	
	PRA 303	X	Internship	C	5	3		
			Total		**31**	**19**		
4			**7 semester**					
	ISE1306	MT2116	Abstract Mathematics 1	S	5	3	2/0/1	MT1174
		300	Elective Discipline	S	5	3		
		300	Elective Discipline	S	5	3		
		300	Elective Discipline	S	5	3		
	PRA 404	X	Pre Diploma Internship	S	4	2		
			Total		**24**	**14**		

Year of Study	Code	UoL Code	Discipline	Cycle	Total credits ECTS	Total credits KZ	Hour Breakdown	Prerequisites
			2 semester					
	ISE1104	X	English Language 2	G	6	4	0/0/4	
	CSE 1110	X	Information and Communication Technology	G	5	3	2/0/1	
	ISE1210	X	Principles of Macroeconomics	C	5	3	2/0/1	
	ISE1212	X	Principles Statistics 2	C	5	3	2/0/1	
	ISE1214	X	Principles Calculus 2	C	5	3	2/0/1	
	PHE 102	X	Physical Education 2	G	4	2	2/0/1	
			Total		**30**	**18**		
			4 semester					
	ISE1208	EC1002	Introduction to economics: Macroeconomic Theory	C	6	3	2/0/1	
	ISE1218	ST104b	Statistics 2	C	6	3	2/0/1	
	ISE1220	MT1173	Algebra 2	C	6	3	2/0/1	
	ISE1216	MT1174	Calculus 2	C	6	3	2/0/1	
	HUM1102	X	Philosophy of Social Sciences	G	5	3	2/0/1	
		X	Elective Discipline	G	3	2		
			Total		**32**	**17**		
			6 semester					
	ISE1229	EC2066	Microeconomics 2	C	6	3	2/0/1	
	ISE1230	EC2065	Macroeconomics 2	C	6	3	2/0/1	
	ISE1222	EC2020	Elements of Econometrics 2	C	6	3	2/0/1	
	ISE1327	MT2175	Further Linear Algebra 2	S	3	2	1/0/1	
	ISE1329	MT2176	Further Calculus 2	S	3	2	1/0/1	
	LAN 1117-LAN 1118	X	Business / Professional Kazakh Language	G	5	3	2/0/1	
			Total		**29**	**16**		
			8 semester					
	ISE1307	MT2116	Abstract Mathematics 2	S	6	3	2/0/1	
		300	Elective Discipline	S	6	3		
		300	Elective Discipline	S	6	3		
		300	Elective Discipline	S	6	3		
		X	Final Attestation		12	7		
			Total		**36**	**19**		
			Total		**240**	**138**		

Cycle	Name of Cycle	Credits (ECTS) ECTS	Required	University	Optionally
G	General (Общий)	56	53		3
C	Core (Базовый)	112		112	0
S	Specialty (Проф.)	60		27	33
	Final Attestation	12	12		
	Total	**240**			

Vice Rector for Academic Affairs **Jumasseitova A.K.**

Head of EMC **Koskina O.V.**

Dean **Islyami A. A.**